

NISTTech

PHOTOACTIVE ARTICLE, PROCESS FOR MAKING, AND USE OF SAME

NIST Docket No. 14-002

Abstract

A photoactive article includes a substrate including a semiconductor to absorb light and to produce a plurality of charge carriers; a dielectric layer disposed on the substrate; a conductive member disposed on the dielectric layer and opposing the substrate such that the dielectric layer is exposed by the conductive member, the conductive member to receive a portion of the plurality of charge carriers from the substrate; and an electrolyte disposed on the dielectric layer and conductive member. Making a photoactive article includes forming a dielectric layer on a substrate by rapid thermal oxidation, the dielectric layer comprising an oxide of a semiconductor; and forming a conductive member disposed on the dielectric layer.

Inventors

- Moffat, Thomas P.

Status of Availability

This invention is available for licensing exclusively or non-exclusively in any field of use.

Last Modified: 05/29/2015